

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
CREATING RULES

The State of Wisconsin Natural Resources Board proposes an order to create ch. NR 331 relating to fish passages

Analysis Prepared by Department of Natural Resources

Statutory authority: ss. 31.02 (4c), ss. 31.02 (4r) and 31.02 (4g), Stats.
Statutes interpreted: ss. 31.02 (4r) and 31.02 (4g), Stats.

This order establishes standards and procedures for implementing a comprehensive fish passage program on Wisconsin's rivers and streams.

**Chapter NR 331
FISH PASSAGE**

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NR 331.01 Purpose. The purpose of this chapter is to establish, pursuant to s. 31.02 (4) (g), and (4r), Stats., standards and procedures for implementing a comprehensive program for fish passage activities in the state's rivers and streams. The chapter specifies the rights held by the public in navigable waters that are dammed and identifies the provisions on the rights held by the public that affect the placement of fishways or fish ladders. It is recognized that dam construction has fragmented many rivers and streams and has prevented various aquatic organisms from accessing critical habitats. Providing fish passage opportunities will reconnect these fragmented habitats and allow aquatic organisms access to additional habitats.

NR 331.02 Definitions. In this chapter:

- (1) "Approval" means the written approval of the department.
- (2) "Barrier" means any dam, facility, structure, or other impediment that prohibits movement.
- (3) "Department" means the Wisconsin department of natural resources.
- (4) "Fishway", "fish ladder" or "fish passage device" means a structure built to allow fish to swim through or to be moved around a barrier in a particular water body.
- (5) "Waters of the state" includes those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface or ground water, natural or artificial, public or private, within the state or its jurisdiction.

NR 331.03 Applicability. The provisions of this chapter apply to any order issued by the department under s. 31.02(4) (c), Stats., after the effective date of this rule ... [revisor insert date].

NR 331.04. Evaluation circumstances. (1) The feasibility of a fish passage device shall be evaluated by the department in, but not limited to, the following circumstances:

(a) If new dam construction is being proposed, the design and construction of a fish passage device shall be considered in the development costs.

(b) If state grant money for dam repair or renovation, as provided in ch. NR 335, will be used at the facility, opportunities to incorporate a fish passage device shall be thoroughly evaluated. .

(c) If the dam requires significant repairs in an area that provides an opportunity for a fish passage such as an abutment in an area located near the shoreline and in the vicinity of the spillway or powerhouse that may provide sufficient attraction flows for migrating fish or if the dam will be reconstructed in a manner that affects its hydraulic capacity or structural integrity, as identified in ch. NR 333, the feasibility of a fish passage device shall be thoroughly evaluated.

(d) Examples of reconstruction areas may be, but not limited to a failed whistle tube, breach of the dam, gate failure, signs of instability or inadequate spillway capacity.

(e) Some facilities may impede the movement of an endangered or threatened species, e.g., winged mapleleaf mussel or gravel chub, to additional habitats such as spawning or seasonal habitats . If high-quality habitats are available upstream from an existing facility for the species in question, and a fish passage device would benefit the population, fish passage shall be thoroughly evaluated. If a significant aquatic resource exists in the immediate and surrounding area and the fishery would benefit from reconnection with a fishway providing an important link to genetic diversity, a fish passage device shall be thoroughly evaluated.

(f) If the consideration of a fish passage device is recommended through a comprehensive planning process such as river management plans, basin plans, water quality management plans, etc. that involved data review and public participation, a fish passage device shall be thoroughly evaluated.

(2) REVISED CIRCUMSTANCES. It should be recognized that these circumstances will be revised as new information or advancing technology indicate that the revisions, as determined by the department, are in the public interest.

NR 331.05 Public rights in waters that are dammed. Public rights in waters that are dammed means the rights heretofore or hereinafter established for the public in navigable waters under the laws of this state pursuant to Article IX, Section 1, Wisconsin Constitution and in conformity with the common law. Public rights heretofore established include, but are not limited to, navigation and all its incidents, boating, fishing and hunting; enjoyment of natural scenic beauty; and the preservation and protection of habitat, water quality and water quantity.

NR 331.06 Fishway prescription process - (1) CANDIDATE IDENTIFICATION. Through an internal approval process using current guidelines, the department , in collaboration with dam owners or municipalities, or both, shall identify candidate facilities for a fish passage device with circumstances identified in s. NR 331.04(1).

(2) DESIGN CRITERIA. To the full extent of its available resources, the department, in collaboration with federal agencies, dam owners, municipalities, and consultants, shall provide the following general information and design criteria to the dam owner so that an appropriate fishway design may be developed:

(a) *Site information.* 1. Location map of the dam or impediment to passage.

2. Basin map showing the location of all barriers to fish passage. Whenever possible, the

locations of spawning, rearing and feeding areas upstream, downstream and at the project site shall be shown.

3. General design drawings of the dam, spillway or powerhouse where fish passage is being prescribed. Both plan and profile views should be included.

4. Photos of the site. Aerial photos are useful, if available.

5. Stream flow data at the site - drainage area, including all the following: This information may be provided by the department if readily available, otherwise this information may need to be derived by the dam owner or dam owner's designee]

a. Annual flow duration curve

b. Flow duration values by month

c. Tailwater rating curve

d. Headwater rating curve

6. Fish passage design flow or operating range - For example, at what flow range is it expected the fishway to be able to pass target fish. The department shall determine what months of the ice-free season the fishway shall be operated.

(b) *Fisheries information.* 1. River or basin fisheries management plan. If a river or basin management plan is not available, a short description of the objectives of fish passage shall be given looking for free passage of all species; reintroduce paddlefish to historic spawning habitat; increase riverine habitat available to threatened or endangered species; etc.

2. Target fish species and other species of interest. Indicate the target species and some estimation of population size, numbers of and size of migrants. Note: The magnitude of the migrating population is important information to properly size the fishway.

3. Migration period seasonal, diel, water column position, passive vs. active, etc. of target species and each species of interest

4. Identification of any special management objectives or concerns, i.e., measures taken to exclude lamprey or other exotic species, fish counting facilities, or the possibility of public viewing windows.

5. Target species and other species of interest swimming speed information.

(c) *Cost/design alternatives.* 1. The department shall furnish the dam owner with a variety of conceptual cost/design analyses for fishways that it believes to be appropriate for the specific conditions.

2. The dam owner may choose to accept the department's analyses or choose to conduct its own analyses at the owner's expense.

(d) Final plans and specifications submitted by the dam owner shall incorporate accepted engineering practices. New or innovative designs, equipment or methods will be encouraged, but will only be accepted with prior approval from the department.

(3) The department shall review all proposed designs subject to this chapter and shall determine with a finding of fact whether the fishway project is feasible. Once the project has been determined to be feasible, the department shall issue a preliminary order and notice the action through the development of a news release to include all of the following:

- (a) The name of the project.
- (b) A brief description of the project including location.
- (c) The name and address of a contact within the department who can receive comments and respond to questions.
- (d) A date by which the department will accept and consider comments.
- (4) The department shall distribute the news release to the appropriate news media in the vicinity of the proposed project.
- (5) Following the notice period, the department shall consider all public comments and may hold an informational meeting to receive further public input.

NR 331.07 Fish passage cost share agreement. (1) **PURPOSE OF AGREEMENT.** Once the department has issued a preliminary order for fishway construction, the dam owner shall apply for available grant money. The department shall work with the dam owner on securing grant money through a cost-share agreement. The cost-share agreement is an agreement listing the conditions and considerations under which a cost-share recipient agrees to install a fish passage device. The department shall maintain and provide to the owner of any dam for which fish passage is required a list of all known federal, state, local or private grants and other forms of assistance currently available. The list shall include eligibility requirements, available amounts, application deadlines and instructions. Orders requiring fish passage shall be made only to dam owners who are eligible for one or more of the available grants or assistance.

(2) **EFFECTIVE DATE.** The cost-share agreement shall be signed before a final order is issued and the construction of the fishway initiated.

(3) **PARTIES TO THE AGREEMENT.** The cost-share agreement shall be between, or as appropriate jointly among, the department and/or other participating governmental units and the dam owner, municipality and/or other entities.

(4) **ELIGIBLE COSTS.** Reasonable and necessary project costs, which are consistent with the approved project, as determined by the department, and incurred during the project period, are eligible for the cost-share grant. Eligible costs may include, but not be limited to:

- (a) Costs associated with a fish passage device feasibility analysis.
- (b) Other costs determined by the department to be necessary

(5) **CONTENT OF THE AGREEMENT.** The cost-share agreement shall contain or describe:

- (a) The name and address of the cost-share recipient .
- (b) The cost-share rates for the project to be cost-shared. The state share of the project cost may not be greater than 40% of the eligible project costs.
- (c) The estimated cost, cost-share rate, and estimated cost-share amount.
- (d) The installation period and schedule.
- (e) A statement of maintenance requirements.
- (f) A requirement to amend the cost-share agreement.

NR 331.08 Fishway evaluation - It is critical that each fishway be thoroughly evaluated for

effectiveness. Initially, department personnel shall conduct fishway evaluations so methods and performance criteria can be properly assessed. Eventually, equipped with the most recent, accepted guidelines, as distributed by the department, the dam owners, or their consultants will be responsible for fishway evaluations.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on

The rules shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

Dated at Madison, Wisconsin _____

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
Darrell Bazzell, Secretary

(SEAL)